

**TRAFFIC-INDEPENDENT ALLOCATION OF WORKING AND
RESTORATION CAPACITY IN NETWORKS**

ABSTRACT OF THE DISCLOSURE

5 A given network of nodes that are interconnected by links having corresponding
capacities has each link's capacity divided into working capacity and restoration capacity
without *a priori* information about network traffic characteristics. Allocation of working
capacity and restoration capacity for the network might be optimized by characterization
of the network in accordance with a linear programming problem (LPP) subject to
network constraints and then generating a solution to the LPP either exactly or with an
10 approximation. Partitioning the capacity of each link in the network into working and
restoration capacities minimizes the restoration capacity overhead in the network to allow
for higher network utilization.